

The Zebras' long walk across Africa

James Gifford investigates some interesting new research into migration patterns of zebras living in Botswana in southern Africa

A

For any animal to travel over 270 km in Botswana partly across the sand and low bush terrain of the Kalahari Desert is a remarkable achievement. But to do so in 11 days and without any obvious motivation, as this zebra population does, is quite extraordinary. On average their journey involves an exhausting round-trip of 588 km – between the Makgadikgadi salt pan area and the Okavango river – making it second only to the great trek undertaken by the zebra herds in the Serengeti National Park. However, what is even more incredible still in my view is that until recently it was completely unheard of.

B

Hattie Bartlam, a researcher, discovered this migration while she was tracking zebra groups, officially known as harems, by the Okavango river for her PhD. Each harem consists of a stallion and his seven or eight mares with juvenile foals. There is no loyalty between zebras beyond this social group, though harems often gather together into so-called herds. For her study, Hattie had planned to compare the small-scale movement patterns of 11 different zebra herds in the area.

C

In December, when the annual rains had transformed the roads into rivers, Hattie was, therefore, more than a little surprised when she checked the data sent by the radio collars she fits to the zebras she is tracking to find that six of the harems were 270 km away on the edge of the Makgadikgadi, a huge mineral-rich area where salt has collected over the years as water evaporates in the heat. Then, when the last of the moisture from the rains had disappeared in May the following year, five of those harems came wearily back to the Okavango. This raised the question: why, despite a plentiful supply of food and water, were the zebras being drawn eastwards to the salt pans? Even more difficult to understand was what made six of the groups travel so far, while the other five remained by the Okavango.

D

This discovery created quite a buzz in the research community. I decided to visit Hattie and she explained that a century ago the large number of Botswana's zebra and wildebeest herds and the resulting competition for grass made migration essential. One of the migration tracks went from the Okavango to Makgadikgadi. But in the late 1960s, giant fences were put up to stop foot and mouth and other diseases spreading between wildlife